

Work Order ID 112526

January-30-14 11:48:24 AM

112526

Page 1

Item ID: D412-742-015 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Electric Step
 Start Date: 1/30/14 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 1/30/14 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 14-02-03 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D412-742	E								
100	DOCUMENT CONTROL	0.00							
100									
DC	Memo <u>M.L.</u>	0.00							
Document Control	Photocopy bluefile & type labels per PPPD412-742-015		CHG001						
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

DAS
31
9-89

14-02-04

2x

DAS
28
9-89

14-02-3

2x

DAS
31
9-89

14-02-04

2x

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 112526

January-30-14 11:48:24 AM

112526

Page 2

Item ID: D412-742-015

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Electric Step

Start Date: 1/30/14

Start Qty: 2.00

2

Cust Item ID:

Required Date: 1/30/14

Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00

130

Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-742-015

Location: PK 012

PPP Rev: _____

2 14-2-4 DAS
989

140

0.00

140

QC21- Final Inspection - Work Order Release

QC

Memo

0.00

Quality Control

ML5 14-02-0514-02-04

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

January-30-14 11:48:23 AM

Page 1

Work Order ID: 112526
Parent Item: D412-742-015
Parent Item Name: Electric Step

Start Date: 1/30/14
Start Qty: 2.00

Required Date: 1/30/14
Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-05-023 JLM
REV.E DD VER:EC
IPP rev:B 12.01.12 PER IIN

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2913 Doubler		Manufactured	No			110	Each	26.0000	1	2	DAS 28 9-89	14-02-3	DAS
DAS 31 9-89				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST021		26							
				106605		24			2x				
				24176		2							
MS21043-4 Nut		Purchased	No			110	Each	538.0000	2	4	DAS 28 9-89		DAS
DAS 31 9-89				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		40							
				104603		40							
				GA		41							
				125807		41							
				ST509		457							
				m127255		457			4x				
MS24693-C272 Screw		Purchased	No			110	Each	1,119.0000	2	4	DAS 28 9-89		DAS
DAS 31 9-89				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST300		133							
				9370		133			4x				
				st507		986							
				17137		467							
				17831		519							
MS35489-35 Grommet		Purchased	No			110	Each	34.0000	1	2	DAS 28 9-89		DAS
DAS 31 9-89				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST289A		34							
				m125807		9			2x				
				m127306		25							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
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Picklist Print

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Page 2

Work Order ID: 112526
Parent Item: D412-742-015
Parent Item Name: Electric Step

Start Date: 1/30/14

Required Date: 1/30/14

Start Qty: 2.00

Required Qty: 2.00

MS35489-93

Purchased

No

110

Each

127.0000

1

2

DAS

28

9-89

14-02-3

Grommet

DAS
31
9-89

Location

Loc Qty

Loc Code

FG

10

121708

6

124903

4

ST289A

117

124903

37

m126474

80

2x

DQA: _____ Date: _____



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14-02-04

5.0 PARTS LIST

5.1 D412-742-011 (PMA/OEM) Float Skidtube Installation Parts List

Item	Qty -011	Qty -041	Qty -015	Part Number	Description
	X			D412-742-011	FLOAT SKIDTUBE INSTALLATION
	1	X		D412-742-041	FLOAT SKIDTUBE
	1		X	D412-742-015	ELECTRIC STEP KIT
		1		D3391-041	412 FLOAT SKIDTUBE
1		*24		*AN3C4A	*BOLT
3		*10		*AN3C6A	*BOLT
4		*4		*AN3C7A	*BOLT
5		*38		*AN960C10L	*WASHER
6		*4		*MS27039C4-12	*SCREW
7A		*4		*D3672-3	*WASHER (REPLACES NAS1515H4L)
7B		*4		*AN960C416L	*WASHER
21		*1		*D4095-041	*WEARSHOE (REPLACES D3564-1)
22		*1		*D4095-043	*WEARSHOE (REPLACES D3564-3)
23		*1		*D4095-045	*WEARSHOE (REPLACES D3564-5)
10		*1		*D3391-011	*412 FORWARD TUBE
11		**1		**D3401-041	**TOW CAP
12A		**10		**AELS-1032-225	**INSERT (REPLACES NAS1330S3KB166)
13		**10		**AN3C4A	**BOLT
14A		**4		**D3672-1	**WASHER (REPLACES NAS1515H3L)
14B		**10		**AN960C10L	**WASHER
24		**1		**D4095-051	**WEARSHOE (REPLACES D3564-13)
20		*1		*D3391-013	*412 MID TUBE
28		**24		**AELS-1032-130	**INSERT (REPLACES NAS1330S3KB116)
30		*1		*D3391-015	*412 AFT TUBE
25		**1		**D4095-049	**WEARPAD (REPLACES D3537-1)
26		**1		**D4095-047	**WEARPAD (REPLACES D3537-7)
31		**1		**D2646	**AFT CAP
32		**14		**AELS-1032-130	**INSERT
36		**8		**AELS-1032-225	**INSERT (REPLACES NAS1330S3KB366)
37A		**6		**AN3C4A	**BOLT
37B		**4		**AN3C5A	**BOLT
38A		**2		**D3672-1	**WASHER (REPLACES NAS1515H3L)
38B		**10		**AN960C10L	**WASHER
39		**4		**ALS4-428-165	**INSERT (REPLACES NAS1330S4KB151)
40	1			D2571	SADDLE, FWD OUTSIDE
41	1			D2572	SADDLE, FWD INSIDE
42	1			D2573	SADDLE, AFT OUTSIDE
43	1			D2574	SADDLE, AFT INSIDE
44	2			D2876	SADDLE SPACER
45	2			D2877	SADDLE SPACER

(CONTINUED ON PAGE 18)

REFERENCE ONLY

DART AEROSPACE USA, INC.

IIN-D412-742

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(CONTINUED FROM PAGE 17)

Item	Qty -011	Qty -041	Qty -015	Part Number	Description
46A	8			D3403-1	BUSHING
46B	8			D3403-5	BUSHING
47A	4			D2747	SET SCREW
47B	2			D3533-1	SET SCREW
48	16			AN4C6A	BOLT
49A	4			AN4C52A	BOLT
49B	4			AN4C53A	BOLT
50	8			AN6C12A	BOLT
51A	32			D3672-3	WASHER (REPLACES NAS1515H4L)
51B	32			AN960C416L	WASHER
52A	8			D3672-9	WASHER (REPLACES NAS1515H6L)
52B	8			AN960C616L	WASHER
53	8			D3672-11	WASHER (REPLACES NAS1515H7L)
54	24			MS21043-4	NUT
55	4			AN4C7A	BOLT
56	2			D3591-1	BUSHING
60	8			D3403-3	BUSHING
61	1			D3405-041	GHW LUG
62	1			D3405-043	GHW LUG
63	4			AN4C47A	BOLT
64	4			MS21043-4	NUT
70	1			D3407-041	TOW RING
71	2			D3417-3	WASHER
72	1			MS21043-4	NUT
73	1			D3456-1	WASHER
80				D2913	DOUBLER
81		***4		***ALS4-428-165	***INSERT (REPLACES NAS1329S4KB140)
82		***4		***AELS-1032-130	***INSERT (REPLACES NAS1330S3KB116)
83			2	MS21043-4	NUT
84			2	MS24693-C272	SCREW
85			1	MS35489-35	GROMMET
86			1	MS35489-93	GROMMET
87		***4		***MS27039C1-09	***SCREW
88		***4		***MS27039C4-08	***SCREW
89A		***4	2	***D3672-1	***WASHER (REPLACES NAS1515H3L)
89B		***4	2	***AN960C10L	***WASHER
90A		***4		***D3672-3	***WASHER (REPLACES NAS1515H4L)
90B		***4		***AN960C416L	***WASHER
91	3			AN3C37A	BOLT
92	2			AN3C40A	BOLT
93	3			AN3C41A	BOLT
94	3			AN3C42A	BOLT
95	3			AN3C43A	BOLT
96	9			AN3C44A	BOLT
98	10			AN3C47A	BOLT
99	66			AN960C10L	WASHER
100	33			MS21043-3	NUT

*DENOTES PART IS INCLUDED WITH D3391-041 ASSEMBLY ABOVE

**DENOTES THAT PART IS INCLUDED ABOVE ASSEMBLY

***DENOTES THAT PART IS INCLUDED WITH D3391-013

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Revision: E
Date: 11.10.19